

# Microsoft® Windows

## Questions and Answers

**Microsoft®**



# **Microsoft® Windows: Questions and Answers**

Microsoft Corporation

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# Introduction

*Microsoft® Windows: Questions and Answers* provides solutions to common problems that often arise when you are using the more advanced features of Microsoft Windows. The questions and answers are organized under the following topics:

- “DOS Requirements,” defines the DOS versions required by Windows.
- “Taking Advantage of Memory,” contains information on how Windows uses memory, and provides procedures for setting up extended and expanded memory.
- “Printing Files and Adjusting Printer Settings,” defines printer-output files and explains printing to serial devices.
- “Running Windows Applications,” explains how to use Windows with applications, and how to convert font files.
- “Using Paint with Windows,” contains information on color, high-resolution monitors, and plotter output.
- “Using a Modem with Windows,” explains how to adjust automatic answering.
- “Running Standard Applications,” contains information on adjusting PIF file settings, and using a mouse with Windows.
- “Additional Information,” describes various other Windows topics.

To use this guide, decide which main topic your question falls under. Then, scan the sideheads in each topic section. The sideheads point to questions and explanations for specific problems.

If you do not find the answer to your question in this booklet, or in the *Microsoft Windows User’s Guide*, see the README.TXT file included on your Microsoft Windows Write Program disk. If you still have questions about using Windows, call Microsoft Product Support Services.



# Questions and Answers

## DOS Requirements

**Q:** *Which version of DOS is required to run Windows 2.x?*

**A:** To run Windows 2.x, you must use DOS 3.0 or later. This is a correction to the DOS version information in the *Microsoft Windows User's Guide*.

**Q:** *Which version of DOS is required to run Windows/386?*

**A:** To run Windows/386, you must use DOS 3.1 or later.

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## Choosing the correct version of DOS

## Taking Advantage of Memory

**Q:** *What should I know about conventional, extended, and expanded memory when using Microsoft Windows?*

**A:** The following information should be used when setting up memory for use with Windows. If you already understand extended and expanded memory, you may want to skip the following "Memory Overview" and go straight to "Setting Up Extended or Expanded Memory." However, if you want to learn about memory, the following information will be helpful.

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## Using expanded memory with Windows

### Memory Overview

When using Windows, you should be aware of three different kinds of memory:

- Conventional
- Extended
- Expanded

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## Different kinds of memory

### Conventional, Extended, and Expanded Memory

Conventional memory is where applications (such as Microsoft Word) reside when you run them. All computers have conventional memory.

In addition to conventional memory, your system may have two additional types of memory: extended or expanded. Most 80386-based computers have some extended memory; however, for 80286-based computers, generally you must purchase an extended or expanded memory board and install it in your computer. Extended and expanded memory improve the performance of Windows.

There are two general types of memory boards: those that have only extended memory, and those that can be set up to have extended memory, expanded memory, or both.

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### Expanded memory manager

If your system uses expanded memory, you must have an expanded memory manager (a program that controls expanded memory). Adding an expanded memory manager to your system is discussed under "Setting Up Extended or Expanded Memory."

Windows includes expanded memory managers for the following expanded memory boards (located on the Windows Utilities 2 disk):

- Intel Above Board
- AST RAMpage!
- IBM PS/2 80286 Memory Expansion Option

The setup procedure described in the following "Setting Up Extended or Expanded Memory" section automatically sets up your expanded memory manager.

For more information on the expanded memory manager for your system, see the following text file that corresponds to your expanded memory board (located on the Windows Utilities 2 disk):

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If you have	See
Intel Above Board	EMM.TXT
AST RAMpage!	REMM.TXT
IBM PS/2 80286 Memory Expansion Option (Model 50 or 60)	PS2EMM.TXT

**Note** Some expanded memory managers for other expanded memory boards are not included with Windows. However, you can use any expanded memory board that includes its own expanded memory manager that meets full LIM 4.0 specifications. To determine if your expanded memory manager meets full LIM 4.0 specifications, see your memory board manual, or contact the manufacturer.

Two DOS utilities included with Windows reduce the time needed for retrieving information from your hard disk: SMARTDrive and RAMDrive. These utilities require that memory be set aside for them. You can use conventional memory; however, it is recommended that you use extended or expanded memory instead. It is recommended that you use SMARTDrive. To use RAMDrive, see RAMDRIVE.TXT located on your Windows Utilities 2 disk.

### Setting Up Extended or Expanded Memory

If you have an extended memory board, simply install the board following the manufacturer's instructions.

If you have a memory board that can be set up with expanded memory, extended memory, or both, you must decide before installation which kind of memory you want to use. The following list shows you how to set up your expanded or extended memory board to achieve the best results with Windows:

If you have	Set up
IBM PC AT (or 100% compatible)	64K (or the minimum the board allows) as extended memory, and the remainder as expanded memory
IBM PC, XT (or 100% compatible), and PS/2 Models 25, 30, 50, 60	All memory as expanded
80386-based computer	All memory as extended (use Windows/386)

### Using SMARTDrive

### Choosing between extended and expanded memory

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## Installing extended or expanded memory

To install extended or expanded memory (after choosing between extended and expanded memory and after installing your memory board), follow these steps:

- 1 Insert the Windows Utilities 2 disk in drive A.
- 2 Run the MEMSET.EXE program by typing the following at the DOS prompt:

*a:memset*

The MEMSET.EXE program analyzes your system memory.

- 3 Follow the instructions on your screen.

MEMSET.EXE recommends the best memory configuration based on the answers you provide to the questions you see on your screen. It then modifies the device = line in your CONFIG.SYS file.

**Note** If you are using an application that directly uses expanded memory for storing data, such as Microsoft Excel, do not allocate all expanded memory to SMARTDrive. Save enough expanded memory for the application to use for its data files (512K is recommended). Use the remaining memory for SMARTDrive.

Since large applications such as Microsoft Excel need the largest portion of memory, always start them before starting other Windows applications.

For more information on setting up SMARTDrive, see Appendix C, "Speeding Up Windows with SMARTDrive," in the *Microsoft Windows User's Guide*. However, there is one correction: if you do not specify an amount of memory, SMARTDrive will receive all expanded memory (the default size), or 256K extended memory (the default size).

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## RAMDrive and SMARTDrive limits

**Q:** *Are there size limits for a RAM disk set up with RAMDrive, or a disk cache set up with SMARTDrive?*

**A:** Each is limited to 4096K. You can have only one SMARTDrive disk cache, and therefore, only one SMARTDRV.SYS line in your CONFIG.SYS file. However, it is possible to have multiple RAMDrives by listing RAMDRV.SYS more than once in your CONFIG.SYS file.

**Q:** *I have expanded memory. When I use the About command in the File menu in MS-DOS® Executive, it reports a different amount of available expanded memory from that reported by my application. For example, after I start Microsoft Excel, switch to MS-DOS Executive, and use the About command, it shows 250K less expanded memory than Microsoft Excel reports. Why are these numbers different?*

**A:** Microsoft Excel takes approximately 250K of expanded memory when it starts, and it keeps this amount for its use. Microsoft Excel includes this amount when it calculates free expanded memory. MS-DOS Executive does not see this memory as being free, since it is not available to other applications. Therefore, Microsoft Excel shows 250K more free expanded memory than MS-DOS Executive. You may see this type of memory discrepancy in other applications as well.

**Q:** *After I start several Windows applications, there is little memory left over for data. Will adding an expanded memory board help?*

**A:** An expanded memory board will help if your applications store data in expanded memory. For example, Microsoft Excel stores its worksheets in expanded memory.

**Q:** *Page 189 of the Microsoft Windows User's Guide suggests using –1 in the Memory Desired box of a PIF file to instruct Windows to swap memory. Why won't Windows/386 accept this value?*

**A:** There is no need to put –1 in a PIF file for a standard application in Windows/386. Windows/386 manages applications and memory differently from Windows 2.x. Each standard application has its own block of memory, so Windows/386 does not obtain additional memory by swapping memory.

**Q:** *Why does the "Not enough disk space to run" message appear when I start a Windows application?*

**A:** This message may appear for one of the following reasons:

- There is not enough disk space to create temporary files. Some Windows applications create temporary files to store data while you work, before it is saved to a file on a disk. To correct this problem, delete any unnecessary files, and restart your application.

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## Memory discrepancies

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## Not enough memory for data

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## Setting the –1 PIF-file swap option

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## Not Enough Disk Space to Run message

- The set TEMP line in your AUTOEXEC.BAT file is incorrect. Make sure the line exists, and that it correctly specifies an existing drive and TEMP directory. For example, the following statement tells a Windows application to create temporary files in a directory called TEMP located on drive C:

```
set TEMP=c:\TEMP
```

For more information on temporary files, see Chapter 1, “Getting Started,” and Chapter 5, “Using MS-DOS Executive,” in the *Microsoft Windows User’s Guide*.

## Printing Files and Adjusting Printer Settings

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### Sending printer output to a file

**Q:** *Can I send printer output to a file instead of sending it to my printer?*

**A:** You can send printer output to a printer-output file. This is a file that has been formatted for printing and which contains printer control characters. To send printer output to a file, rather than directly to your printer, follow these steps:

- 1 Start Notepad by running the NOTEPAD.EXE program from MS-DOS Executive.
- 2 Open your WIN.INI file.
- 3 Add the following line below the [ports] section of your WIN.INI file:

**[drive:]filename=**

The drive letter is optional. The current drive and directory are used if you do not specify a drive or directory.

For example, to send printer output to a file called OUTPUT.PRN, include the following line in your WIN.INI file:

**OUTPUT.PRN=**

- 4 Save the changes to your WIN.INI file.
- 5 Quit and restart Windows.

You must quit and restart Windows so that Windows will recognize the changes you made to your WIN.INI file.

**Q:** *How do I print printer-output files from MS-DOS Executive?*

**A:** A printer-output file has been formatted for printing and contains printer control characters. To print a printer-output file from MS-DOS Executive, follow these steps:

- 1** Select the printer-output filename you want to print; for example, OUTPUT.PRN.
- 2** Select the File menu and choose the Copy command.
- 3** Specify the printer port in the To text box.
- 4** Press ENTER.

**Note** Do not use the Print command in the File menu. This command formats a specified file and sends it to your printer. If you print a printer-output file by using the Print command, it reformats the file and duplicates printer control characters. The result is garbled printer output.

**Q:** *When I try to print with a serial printer or a serial plotter, either nothing happens, or the output is incorrect or incomplete.*

**A:** Before you print, you must set up a serial communications port.

To set up a serial communications port, follow these steps:

- 1** Start Control Panel by running the CONTROL.EXE program from MS-DOS Executive.
- 2** Select the Setup menu and choose the Communications Port command.
- 3** Set Baud Rate to 9600.
- 4** Set Word Length to 8.
- 5** Set Parity to None.
- 6** Set Stop Bits to 1.
- 7** For a serial printer, set Handshake to None. For a serial plotter, set Handshake to Hardware.
- 8** Press ENTER.

**Note** Printer errors may also be caused by incorrect cable connections. For information on your printer cables, see your printer manual.

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**Printing a printer-output file**

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**Printing with a serial printer or serial plotter**

For information on Control Panel and setting up communications ports, see Chapter 7, "Using Control Panel," in the *Microsoft Windows User's Guide*.

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## Spooler capacity

**Q:** *Is there a limit to the number of printing jobs Spooler can hold?*

**A:** Spooler can hold as many as 20 printing jobs for each printer port.

## Running Windows Applications

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### System Error: Reading Temp Files message

**Q:** *What does it mean when the "System Error: Reading Temp files" message appears?*

**A:** This message may appear when Windows 2.x uses a program (for example, SPOOLER.EXE) from a previous version of Windows, such as Windows 1.0.

To update Windows and remove old Windows programs, follow these steps:

- 1 Save any files you want to keep in a temporary directory (be sure to copy any special PIF files).
- 2 Delete Windows 1.0.
- 3 If you have subdirectories for applications that ran under Windows 1.0, or that include a run-time version of Windows, go to those directories and check for old versions of CLIPBRD.EXE, CONTROL.EXE, and SPOOLER.EXE. If they exist, rename or delete them.
- 4 Install Windows 2.x. Make sure that the Windows 1.0 path is no longer specified in the PATH line in your AUTOEXEC.BAT file.
- 5 Copy the files you saved in Step 1 into your Windows 2.x directory.

**Note** Your WIN.INI file is renamed WIN.OLD when you install Windows 2.x over an earlier version of Windows. You can rename this file to WIN.INI if it contains important information. You can also use Notepad to copy information from WIN.OLD into your new WIN.INI file.

**Q:** *Why do some letters appear as black squares or nonsense characters when I use particular fonts in some Windows applications?*

**A:** Some Windows applications include font files (files with a .FON extension); for example, PageMaker 1.0A. Font files designed for use with earlier versions of Windows will not work correctly with Windows 2.x or Windows/386. Use the NEWFON.EXE program included with Windows 2.x and Windows/386 to convert your old font files to the new format.

To convert font files, follow these steps:

- 1 Move to the drive and directory where your old font files are located.  
Fonts may exist in several different directories. If so, repeat the following steps in each directory.
- 2 Create a backup copy of the old font files by typing the following at the DOS prompt:  
*copy \*.fon \*.bak*
- 3 Insert the Windows Fonts 1 disk in drive A.
- 4 Start the NEWFON.EXE program by typing the following:  
*a:newfon old-font-filename*
- 5 Press ENTER.

To convert all existing fonts to the Windows 2.x font format, follow these steps:

- 1 Insert the Windows Fonts 1 disk in drive A.
- 2 Type the following at the DOS prompt:  
*a:newfon \*.fon*
- 3 Press ENTER.

To convert the PageMaker PMFONTA.FON, PMFONTB.FON, and PMFONTE.FON font files, follow these steps:

- 1 Insert the Windows Fonts 1 disk in drive A.
- 2 Convert the PMFONTA.FON font file by typing the following at the DOS prompt:  
*a:newfon pmfonta.fon*
- 3 Press ENTER.

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## Nonsense characters in Windows applications

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## Converting all font files

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## Converting PageMaker font files

- 4 Convert the PMFONTB.FON font file by typing the following at the DOS prompt:  
*a: newfon pmfontb.fon*
- 5 Press ENTER.
- 6 Convert the PMFONTE.FON font file by typing the following at the DOS prompt:  
*a: newfon pmfonte.fon*
- 7 Press ENTER.

## Using Paint with Windows

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### Paint does not run in color

**Q:** *Why doesn't Microsoft Windows Paint run in color?*

**A:** Paint was not designed to run in color because displaying color bitmaps requires three times the memory required to display a monochrome bitmap.

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### Using Paint with high-resolution monitors

**Q:** *Why is only the top half of my screen used when I am running Paint on a high-resolution monitor?*

**A:** A Paint bitmap is limited to 64K; however, some high-resolution monitors allow bitmaps larger than 64K. These monitors display Paint bitmaps in the top half of the screen.

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### Using a plotter with Paint

**Q:** *Can I send output to a plotter using Paint?*

**A:** Plotters are not supported by Paint. If a plotter is designated as the output device, the Paint Print command in the File menu is grayed, and cannot be chosen.

## Using a Modem with Windows

**Q:** *Why does my modem answer automatically, even when it is set for manual answering?*

**A:** Some modems switch to an auto-answer mode when used with Windows. To correct this, follow these steps:

- 1 Start Notepad by running the NOTE PAD.EXE program from MS-DOS Executive.
- 2 Open your WIN.INI file.
- 3 Add the following line below the [windows] section of your WIN.INI file:  
*modem = none*
- 4 Save the changes to your WIN.INI file.
- 5 Quit and restart Windows.

You must quit and restart Windows so that windows will recognize the changes you made to your WIN.INI file.

**Modem answers automatically**

## Running Standard Applications

**Q:** *Why does a "Load file not found" message appear when I try to run a standard application using its PIF file?*

**A:** This message may appear when the Initial Directory setting in the PIF file is incorrect. This setting tells Windows which drive and directory to go to when an application is started.

To correct the Initial Directory setting, follow these steps:

- 1 Start PIF Editor by running the PIFEDIT.EXE program from MS-DOS Executive.
- 2 Select the File menu and choose the Open command. You will see a dialog box listing all available PIF files.
- 3 Select the PIF filename you want to edit, and press ENTER.
- 4 In the Initial Directory text box, type the drive and directory where your application is located.
- 5 Save the changes to your PIF file.

**Load File Not Found message**

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## Insert Program Disk message

**Q:** *When I try to run a standard application such as Microsoft Word, I am asked to insert the program disk into drive A. Why does this message appear when the program is installed on my hard disk?*

**A:** This message may appear when Windows cannot find the application you are trying to run. You need to correct the program name in the corresponding program PIF file. To make this correction, follow these steps:

- 1** Start PIF Editor by running the PIFEDIT.EXE program from MS-DOS Executive.
- 2** Select the File menu and choose the Open command. You will see a dialog box listing all available PIF files.
- 3** Select the PIF filename you want to edit, and press ENTER.
- 4** Type the application filename in the Program Name text box. If the application is in a subdirectory, type the full pathname including the drive letter.
- 5** Save the changes to your PIF file.

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## Using a mouse with a standard application

**Q:** *Why doesn't my mouse work when I run a standard application with Windows?*

**A:** Standard applications (applications written for DOS rather than Windows) have special files called "mouse drivers" that control the mouse. Under normal circumstances, these mouse drivers are started by using DOS when you run an application. If you run an application with Windows, mouse drivers must be started before starting Windows. For information on your mouse and mouse driver, see your mouse manual.

## Additional Information

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## Running Windows/386 on Ungerma... or 3Com networks

**Q:** *Why does my system occasionally crash when I run Windows/386 on an Ungerma... or 3Com network?*

**A:** Recent releases of Ungerma... and 3Com network software contain two programs that do not run properly with Windows/386: PSCLOSE.COM on the Ungerma... network, and PRTSC.EXE on the 3Com network. At this time, you cannot

use these two programs. To prevent these programs from running, follow these steps:

- 1 Start Notepad by running the NOTEPAD.EXE program from MS-DOS Executive.
- 2 Open your MSNET.INI file.

This file is usually located in the \net, \network, or \ubnet directory.

- 3 Delete the line from the [net start urdr] section of your MSNET.INI file that contains the PSCLOSE.COM or PRTSC.EXE program.
- 4 Save the changes to your MSNET.INI file.
- 5 Quit Windows.
- 6 Restart your system.

You must restart your system so that it will recognize the changes you made to your MSNET.INI file.

For more information on these programs, contact your network software salesperson.

**Q:** *What network hardware works with Windows?*

**A:** The following network hardware works correctly when used with Windows 2.x or Windows/386 version 2.03 or later:

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#### Compatible network hardware

- 3Com Etherlink
- 3Com Etherlink2
- AT&T Starlan
- IBM PC Network
- IBM Token-Ring
- SMC ArcNet
- Ungermann-Bass NIU

While other network hardware may work, Microsoft does not guarantee Windows support for other network hardware.

**Q:** *What network software works with Windows?*

**A:** Windows works with any 100% Microsoft Networks redirector-based network shells. To determine if your network software meets this specification, contact the network software manufacturer.

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#### Compatible network software

Windows works with the following non-Microsoft Networks redirector-based network shells, provided they are the latest versions available:

- Novell NetWare
- Banyan Vines

While other network software may work, Microsoft does not guarantee Windows support for other network software.

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### Expanded memory board hardware conflicts

**Q:** *My system configuration includes expanded memory, a network card, and a terminal-emulation board. I have correctly installed both the expanded memory board and the expanded memory manager. Can multiple hardware boards conflict with one another?*

**A:** Some hardware boards, including some network and terminal-emulation boards, cause memory conflicts when used with an expanded memory board. The conflict occurs when both boards try to use the same memory. The conflict may cause a malfunction of either the expanded memory board or the other boards. If you experience these problems, call Microsoft Product Support Services.

It is possible to work around this problem by changing the memory address used by the expanded memory board (your memory board uses this address to communicate with your computer).

To change the memory address, follow these steps:

- ① Determine the address range for the “other” board. For information on the address range your board uses, see the board manual, or contact the manufacturer.
- ② Set the /x parameter of the expanded memory manager device= line in your CONFIG.SYS file.

For example, the IBM 3270 Terminal Emulation board uses address range COOO–CFFF. This range conflicts with the PS2EMM.SYS expanded memory manager, which uses address range AOOO–FFFF. The device= line would be the following:

**device=ps2emm.sys /x=COOO-CFFF**

The /x parameter tells PS2EMM.SYS to exclude the address range used by the emulation board, and thus prevents the memory conflict.

**Q:** *I have an EGA card with 64K of memory, and an enhanced color monitor. When I run Windows I get color, but only in low resolution.*

**A:** Windows requires an EGA card with more than 64K of memory to run high-resolution color (640 × 350, in eight colors).

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**EGA card:  
low-resolution color**

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**Q:** *All of my applications, except Windows, run in color on my IBM Personal System/2 Model 30. Can I run Windows in color?*

**A:** Windows will not run in color on the IBM PS/2 Model 25 or Model 30. These models use the multi-color graphics array adapter, which does not have the memory capacity to display color in addition to the Windows graphics.

Windows will run in color on an IBM PS/2 Model 50, 60, or 80. These models use the video graphics array adapter.

**Running Windows in  
color on an IBM PS/2  
system**

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**Q:** *Why do files beginning with a tilde (~) and ending with a .TMP extension appear in my root directory when I exit Windows? Can I delete them?*

**A:** These files are temporary files created by some Windows applications and they remain after you exit Windows unexpectedly.

Do not delete temporary files during a Windows session; your application may still need them. Temporary files can be deleted after quitting Windows.

For more information on temporary files, see Chapter 1, "Getting Started," in the *Microsoft Windows User's Guide*.

**Files beginning with a  
tilde (~)**

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**Q:** *I accidentally deleted several Windows files. Can these files be recovered from the .TMP files?*

**A:** Windows applications delete .TMP files when you quit the application. However, if you are working with a particular file and restart your computer by using CONTROL+ALT+DELETE instead of quitting your application, a .TMP file is saved.

**Recovering a deleted  
file**

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To find the .TMP file and recover your deleted data, follow these steps:

- 1 From MS-DOS Executive, select the directory containing .TMP files (the directory specified by the set TEMP line in your AUTOEXEC.BAT file).
- 2 Locate the .TMP file that begins with a tilde (~) followed by three characters matching the extension of your deleted file. For example, the .TMP file for a Windows Write file begins with ~WRI.
- 3 If more than one .TMP file exists, select the View menu and choose the Long command to see which file most closely matches the size or date of the deleted file.
- 4 Rename the .TMP file using its original name.

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### Setting keyboard repeat rate

**Q:** *Is there a way to change my keyboard repeat rate?*

**A:** To change your keyboard repeat rate, follow these steps:

- 1 Start Control Panel by running the CONTROL.EXE program from MS-DOS Executive.
- 2 Select the Preferences menu and choose the Keyboard Speed command.
- 3 Select the setting you want.  
The farther right the blinking indicator, the faster the keyboard repeat rate will be.
- 4 Press ENTER.

To test the new keyboard repeat rate, follow these steps:

- 1 Select the Test Typematic text box.
- 2 Press and hold down any character key and observe the repeat rate.
- 3 Adjust the repeat rate, or press ENTER.







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